

WHAT IS CLAIMED IS:

1. An ink-package assembly including an ink package fluid-tightly containing a mass of an ink, and a sealing wrapper fluid-tightly enclosing said ink package, wherein an interior space of said sealing wrapper is charged with an inert gas which has a lower degree of solubility in said ink, than the air.

2. The ink-package assembly according to claim 1, wherein said inert gas is a helium gas.

3. The ink-package assembly according to claim 1, wherein said ink package includes a flexible ink bag having an opening at one end thereof, and is provided with a spout which is fixed to said opening, said spout having a passage for communication between an interior space and an exterior space of said ink bag, said flexible ink bag being further provided with a closure member closing said passage, and wherein said flexible ink bag containing the mass of the ink such that said passage is not filled with the ink, and is charged with said inert gas.

4. The ink-package assembly according to claim 3, wherein said spout is fixed at an outer circumferential surface thereof to an inner surface of said opening.

5. The ink-package assembly according to claim 3, wherein said closure member is a plug press-fitted in said passage.

6. The ink-package assembly according to claim 1, wherein said ink package includes a flexible ink bag having an opening at one end thereof, and is provided with a spout which is fixed at an outer circumferential surface thereof to an inner surface of said opening, said spout having a passage for communication between an interior space and an exterior space of said ink bag, said flexible ink bag being further provided with a cap press-fitted in said passage, and wherein said flexible ink bag containing the mass of the ink such that said passage is not filled with the ink, and is evacuated to a reduced pressure lower than the atmospheric pressure.

7. The ink-package assembly according to claim 1, wherein said interior space of said sealing wrapper is evacuated to a reduced pressure lower than the atmospheric pressure such that an inner surface of said sealing wrapper is just in contact with an outer surface of said ink package.

8. The ink-package assembly according to claim 7, wherein said reduced pressure is selected within a range between about -20kPa and about -60kPa with respect to the atmospheric pressure.

9. The ink-package assembly according to claim 7, wherein said ink package includes a flexible ink bag fluid-tightly containing said mass of the ink, an ink-bag casing accommodating said flexible ink bag, and a reinforcing structure which is interposed between an inner surface of said ink-bag casing and an outer surface of said ink bag, to prevent deformation of said ink-bag casing due to said reduced pressure within said interior space of said sealing wrapper, for thereby protecting said ink bag against the deformation of said ink-bag casing.

10. The ink-package assembly according to claim 9, wherein said reinforcing structure positioned in place in said ink-bag casing defines a space which has a shape following a shape of said ink bag and in which said ink bag is accommodated.

11. The ink-package assembly according to claim 9, wherein said reinforcing structure includes a first lattice member having a first latticework and a first curved portion for covering one of opposite major surfaces of said ink bag, and a second lattice member having a second latticework and a second curved portion for covering the other of said opposite major surfaces of the ink bag, said first and second lattice members being positioned within said ink-bag casing, such that said ink bag is interposed between said first and second curved portions of said first and second lattice members.

12. The ink-package assembly according to claim 10, wherein said first lattice member further has a first peripheral portion located outwardly of said first curved portion, and said second lattice member further has a second peripheral portion located outwardly of said second curved portion, said first and second peripheral portions cooperating to sandwich a corresponding peripheral portion of said ink bag, and having a size substantially equal to a size of said peripheral portion of said ink bag.

13. The ink-package assembly according to claim 9, wherein said ink bag has an opening at one end thereof and is provided with a spout which is fixed at an outer circumferential surface thereof to an inner surface of said opening, said spout having a passage for communication between an interior space and an exterior space of said ink bag, said ink bag being further provided with a cap press-fitted in said passage, and wherein said spout is fixed to one of opposite ends of said ink-bag casing, and said reinforcing structure positioned in place in said ink-bag casing defines a space in which said ink bag is accommodated, said space being generally tapered in cross section taken in a plane which is generally perpendicular to opposite major surfaces of said ink bag and which is parallel to a direction in which said opposite ends of said ink-bag casing are opposed to each other, said generally tapered space gradually expanding in a direction from the other of said opposite ends of said ink-bag casing toward said one of said opposite ends.

14. A method of producing an ink-package assembly defined in claim 3, comprising the steps of:

an ink filling step of filling said flexible ink bag such that said passage of said spout is not filled with the ink;

an evacuating step of evacuating said passage of said spout and said interior space of said sealing wrapper to a reduced pressure, after said ink filling step, while said ink package is enclosed in said sealing wrapper, and before said cap is press-fitted in said passage; and

a gas charging step of charging said passage and said interior space of said sealing wrapper with said inert gas, before said cap is press-fitted in said passage and before said sealing wrapper is fluid-tightly closed to fluid-tightly enclose said ink package.

15. A method of producing an ink-package assembly defined in claim 4, comprising the steps of:

an ink filling step of filling said flexible ink bag such that said passage of said spout is not filled with the ink;

an evacuating step of evacuating said passage after said ink filling step; and

a gas charging step of charging said interior space of said sealing wrapper with said inert gas, after said evacuating step and while said ink package is enclosed in said sealing wrapper with said cap press-fitted in said passage.